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| APPLICATION NO. | F | ILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|---|------|------------|----------------------|---------------------|------------------|--|
| 10/712,117 | | 11/12/2003 | Malgorzata Bugajski | BECKER-1005 | 7669 | |
| 7733 | 7590 | 07/19/2005 | | EXAMINER | | |
| WALKER & JOCKE, L.P.A. 231 SOUTH BROADWAY STREET MEDINA, OH 44256 | | | | SAMPLE, DAVID R | | |
| | | | | ART UNIT | PAPER NUMBER | |
| | | | | 1755 | | |

DATE MAILED: 07/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) |
|---|--|---|--|
| Office Astrono Commence | | 10/712,117 | BUGAJSKI ET AL. |
| | Office Action Summary | Examiner | Art Unit |
| <u></u> | | David Sample | 1755 |
| Period fo | The MAILING DATE of this communication app or Reply | ears on the cover sheet with the c | orrespondence address |
| THE - Exte after - If the - If NC - Failu Any | ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period we are to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | ely filed swill be considered timely. the mailing date of this communication. O (35 U.S.C. § 133). |
| Status | | , | |
| 1)⊠ | Responsive to communication(s) filed on 12 No. | ovember 2003. | |
| 2a)□ | _ | action is non-final. | |
| 3)□ | Since this application is in condition for allowar | nce except for formal matters, pro | secution as to the merits is |
| | closed in accordance with the practice under E | x parte Quayle, 1935 C.D. 11, 45 | 3 O.G. 213. |
| Dispositi | on of Claims | , | |
| 4)🛛 | Claim(s) 1-19 is/are pending in the application. | | |
| | 4a) Of the above claim(s) is/are withdraw | vn from consideration. | |
| · | Claim(s) is/are allowed. | | • |
| | Claim(s) <u>1-19</u> is/are rejected. | • | |
| 7)∐ | Claim(s) is/are objected to. | a alastian rasuirament | · |
| ا∟ره | Claim(s) are subject to restriction and/or | election requirement. | |
| Applicati | on Papers | | |
| 9)[| The specification is objected to by the Examine | r. · | |
| 10) | The drawing(s) filed on is/are: a) \square acce | epted or b) objected to by the E | xaminer. |
| | Applicant may not request that any objection to the o | • • • | · · |
| | Replacement drawing sheet(s) including the correcti | | • • |
| 11)[_] | The oath or declaration is objected to by the Ex | aminer. Note the attached Office | Action or form PTO-152. |
| Priority u | ınder 35 U.S.C. § 119 | | |
| | Acknowledgment is made of a claim for foreign ☑ All b) ☐ Some * c) ☐ None of: | priority under 35 U.S.C. § 119(a) | -(d) or (f). |
| | 1. Certified copies of the priority documents | | |
| | 2. Certified copies of the priority documents | | |
| | 3. Copies of the certified copies of the prior | - | d in this National Stage |
| * 5 | application from the International Bureau See the attached detailed Office action for a list of | • | d |
| | and account december office decient for a list (| or and defailed copied flot received | u. |
| Attachmen | t(s) | | · |
| _ | e of References Cited (PTO-892) | 4) Interview Summary (| (PTO-413) |
| 2) Notic 3) Inform | e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date 20031112. | Paper No(s)/Mail Da | |

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement filed November 12, 2003 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed.

Applicants did not submit a copy of the non-patent literature reference authored by Shigetoshi Uto et al., therefore, the reference has not been considered and has been lined through on the PTO/SB/08A.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9, 20, 25, and 19 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 9 and 10, "the application temperature" lacks literal antecedent basis.

Claim 15 is indefinite for the use of parenthetical phrases because the claim is unclear as to whether the parenthetical phrases are explicit recitations of the claim or are merely exemplary.

The term "fine" in claim 16 is a relative term which renders the claim indefinite. The term "fine" is not defined by the claim, the specification does not provide a standard for

ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably appraised of the scope of the invention.

Claim 19 provides for the use of the batch of claim 1, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 19 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd.* v. *Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Naito et al. (US Patent No. 4,334,029).

Examples C-32, 3-2, to 3-6 of Naito et al. anticipate one or more claims 1, 2, 5-8, 11-16, and 18. See col. 9, lines 26-67, col. 10, lines 26-38, col. 13, lines 31-32, col. 19, lines 64-66, and Table 12, col's 35-38.

The examiner notes that the present claims refer to mass percent whereas the reference refers to parts by weight. The following is a table showing the compositions of the reference in mass percent:

| Example: | C-32 | 3-2 | 3-3 | 3-4 | 3-5 | 3-6 |
|--------------------------------------|-------------------------------|----------------------------|-------|-------|-------|-------|
| Siliceous binder | SSB-4 (sodium boron silicate) | SSB-4 | SSB-4 | SSB-4 | SSB-4 | SSB-4 |
| Siliceous binder in M% | 5 | 5 | 7 | 8. | 5 | 5 |
| C-forming component | Tar and pitch | PRP (Phenolic resin) | PRR | PRP | PRP | PRP |
| C-forming component in M% | 5 | 5 | 5 | 5 | 5 | 8 |
| Phosphate containing component | H-3 (Silicon polyphosphate) | Н-3 | H-3 | Н-3 | H-3 | H-3 |
| Phosphate containing component in M% | 3 | 3 | 3 | 3 | 5 | 4 |
| Refractory Mat'l M% | 87 , | 87 | 85 | 84 | 87 | 83 |

The refractory material in the above examples was sintered coarse alumina, sintered fine powder alumina and scaly graphite having a particle size of 1-3 mm, less than 0.074 mm, and less than 0.074 mm, respectively. See the table bridging col's 34 and 35.

The reference fails to disclose an example which anticipates claims 3 and 17, however, the reference discloses closely overlapping ranges with the ranges recited in claims 3 and 17 and are deemed to be sufficiently specific to anticipate the ranges of claims 3 and 17. See the abstract of the reference and MPEP 2131.03.

The reference fails to disclose the properties of claims 4, 9 and 10, however, the properties of a refractory are determined by its composition, and the composition of the reference is identical to the composition of the reference. Therefore, the claimed properties are assumed to be inherent to the composition of the reference. See MPEP 2112.

The recitations of claim 19 can be found in the reference at col. 8, lines 32-48.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naito et al. (US 4,334,029).

As noted above, Naito et al. fails to disclose an anticipatory example, and for purposes of this rejection, it is assumed that the ranges are not sufficiently specific to anticipate claims 3 and 17.

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However, the reference describes a composition with overlapping ranges of components with the composition of the instant claims. See the abstract. Overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Sample whose telephone number is (571)272-1376. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (572)272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Sample

Primary Examiner

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